

REMARKS

The applicants and the undersigned respectfully request that the foregoing amendment be entered for the above-referenced patent application. Applicants submit that the subject matter of the above-described amendments do not introduce new matter, as this subject matter is disclosed in applicants specification on pages 31-52. Specific examples of methods related to constrained motion simulation limited to an allowed direction are described on page 45.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the U.S. Postal Service in a sealed envelope as first class mail with postage thereon fully prepaid and addressed to the Commissioner for Patents, P.O. Box 2327, Arlington, VA 22202, on the below date.

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VERSION WITH MARKINGS TO SHOW CHANGES MADE JULY 25, 2002

In the Specification:

A paragraph regarding government support has been added immediately following the title.

The paragraph beginning on page 1, line 4, has been amended as follows:

This [application is a Continuation of] is a United States national application corresponding to co-pending International Application No. PCT/US99/30753, filed on December 23, 1999, which [is a Continuation-in-Part of US Patent Application No. US/60/113,629, filed on December 23, 1998, priority of the filing dates of which is hereby claimed under 35 U.S.C. §§ 120 and 119, respectively] designates the United States, the benefit of the filing date of which is hereby claimed under 35 U.S.C. § 371. The co-pending International Application No. PCT/US99/30753 claims the benefit of U.S. Patent Application No. 60/113,629, filed on December 23, 1998, the benefit of the filing date of which is hereby claimed under 35 U.S.C. § 119. Each of these applications is incorporated herein by reference.

In the Claims:

1. (Amended) A method for providing a virtual environment for simulating the arrangement of a plurality of parts into an assembly, comprising:

- (a) creating a model in a design environment for each part, each model having a geometry that corresponds to a part;
- (b) translating each model into a virtual part in the virtual environment, the design environment being integrated with the virtual environment; and
- (c) enabling each virtual part to be positioned in an assembly within the virtual environment, wherein the positioning of each virtual part enables a constrained motion simulation to be performed for the arrangement of the plurality of parts into the assembly,

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wherein the constrained motion simulation limits the simulated motion of at least one virtual part to an allowed direction.

Claims 32-36 have been added.

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